

**REMARKS****Summary of the Office Action**

In the Office Action, the drawings stand objected to.

Claims 1-4 stand rejected under 35 U.S.C. § 102 (b), as being anticipated by U.S. Patent No. 5,884,698 to *Hughes*.

**Summary of the Response to the Office Action**

Applicant proposes amending claims 1 and 4, adding new claim 5, and submitting replacement drawing sheets 1, 2, 3, 4 and 6. Accordingly, claims 1-5 are pending for further consideration.

**Objection to the Drawings**

In the Office Action, the drawings stand objected to.

As required in the Office Action, the attached sheets of drawings include changes to Figs. 1, 2, 3, 4, 5, 6, 11 and 12, which have been amended so as to make reference to elements 1', 2', 3', 4', 5' and 6', which had previously been labeled as elements 1, 2, 3, 4, 5 and 6. Additionally, detail views A, B and C for Fig. 7 have been appropriately labeled. Therefore, new sheets 1, 2, 3, 4 and 6 replace original sheets 1, 2, 3, 4 and 6.

Accordingly, Applicant respectfully requests withdrawal of the objection to the drawings.

**All Claims are Allowable**

In the Office Action, claims 1-4 stand rejected under 35 U.S.C. § 102 (b), as being anticipated by U.S. Patent No. 5,884,698 to *Hughes*. Applicant traverses this rejection for the following reasons.

**Independent claim 1**

With regard to independent claim 1, Applicant respectfully asserts that *Hughes* does not teach or suggest a downhole system for locating and fixing equipment at required depth and orientation within a wellbore, wherein, "said equipment being secured to the latch sub by means of a first connection between said equipment and the anchor packer and a second connection

between the anchor packer and the latch sub, wherein the first and second connections prevent relative movement between the connected components,” as recited in independent claim 1, as amended.

Support for these features recited in claim 1 can be found at least on pages 1-11 of the originally filed specification, and in Figs. 1-22 of the originally filed drawings. Specifically, as shown in Figs. 1-10, the present invention provides a downhole system for locating and fixing equipment at required depth and orientation within a wellbore. The system includes a portion of well bore casing 6' having an inner surface in which a latch profile 5' is defined. The system further includes a latch sub for locating equipment secured thereto at a required depth and orientation, and an anchor packer for releasably fixing the depth and orientation of the latch sub relative to a well bore. For the present invention, the equipment is secured to the latch sub by means of a first connection between the equipment and the anchor packer and a second connection between the anchor packer and the latch sub, such that the first and second connections prevent relative movement between the connected components. As shown in Figs. 2-4, the latch sub includes a body and a latching member 3' mounted on the body so as to be movable between a retracted position and an extended position. Latching member 3' projects a greater radial distance from the body when in the extended position than when in the retracted position, and is adapted to project into latch profile 5' provided in the portion of well bore casing 6' when in the extended position during use. A first portion of latch profile 5' is adapted to be engaged by latching member 3' in such a way that, when pressed against the profile portion, latching member 3' tends to slide along a well bore casing edge defining profile portion so as to locate latching member 3' in abutment with a second profile portion and thereby prevent further movement of the latch sub in the direction of pressing. Latching member 3' is further adapted to engage a third portion of the profile in such a way that, when pressed against the third profile portion, latching member 3' is moved towards the retracted position so as to permit movement of the downhole apparatus past the latch profile.

The Office Action cites *Hughes* as teaching or suggesting the downhole system of the present invention as recited in independent claim 1.

*Hughes*, as illustrated in Figs. 6, 7 and 8, discloses a whipstock assembly for which it can be seen that if a lateral borehole is to be drilled through window 92 (see Fig. 6) then the

apparatus of Fig. 8 must be run inhole. The apparatus for *Hughes* is run until packer 116 engages gripping profiles 88 of restriction tube 82. Upon engaging gripping profiles 88, anchor 116 becomes secured to tube 82 (Col. 5:64 – Col. 6:1). At this point, whipstock face 104 may be rotated relative to the now secured anchor 116 by means of swivel joint 114. The whipstock surface 104 is rotated until latch member 109 engages with latch profile 96 in the wellbore casing. Thus, the engagement of packer 116 with tube 82 sets the required depth of whipstock surface 104 while the angular orientation of whipstock surface 104 is determined by engagement of latch member 109 in latch profile 96.

One significant problem associated with the whipstock assembly of *Hughes* is that if a lateral borehole is then to be drilled through lower window 94 (see Fig. 6), then the apparatus of Fig. 8 must be withdrawn uphole, and further, a modified (i.e. shortened) apparatus as shown in Fig. 7 must then be run downhole. It is not possible for the apparatus of Fig. 8 to be simply unlatched from latch profile 96 and run further downhole so as to engage with lower latch profile 98. This is because tube 82 is a restriction in the borehole which cannot be passed by anchor 116. The need to withdraw the apparatus of Fig. 8 and then run the modified apparatus of Fig. 7 is significantly time-consuming and costly, particularly in the case of deep wellbore operations.

The aforementioned problem is overcome with the downhole system of the present invention which does not require tube 82 of *Hughes* and, as a consequence, can be selectively moved between upper and lower latch profiles 96, 98. More specifically, it will be seen particularly with reference to the schematic views of Figs. 11 and 12 of the present application that the equipment to be orientated in the downhole system of the present invention (i.e. the whipstock) is connected to the anchor packer in such a way that relative movement between the whipstock and the anchor packer is prevented. This connection technique is specifically recited in independent claim 1, which recites, “said equipment being secured to the latch sub by means of a first connection between said equipment and the anchor packer and a second connection between the anchor packer and the latch sub, wherein the first and second connections prevent relative movement between the connected components.” As a consequence of this connection method, the conveying string can, in use, be rotated so as to transmit a rotary force to the whipstock. By virtue of the aforementioned connection, this rotary force is transmitted to the anchor packer. Also, according to the downhole system of the present invention as recited in

independent claim 1, the anchor packer is connected to the latch sub in such a way as to prevent relative movement between the anchor packer and the latch sub. Thus, if the latch member of the latch sub is first located in the latch profile of the wellbore casing so that the latch sub is prevented from rotating, then a rotary force transmitted from the whipstock to the anchor packer will be resisted. This allows a torque to be applied to the anchor packer so that the anchor packer can be activated to grip the surrounding wellbore casing. The whipstock assembly of *Hughes* allows no such operational flexibility. Moreover, it will be understood that the anchor packer may be activated to grip the wellbore casing without the need for a tube 88 which dictates the depth at which the packer must be activated and restricts the passage of wellbore equipment.

For at least the reasons discussed above, Applicant respectfully asserts that *Hughes* does not teach or suggest a downhole system for locating and fixing equipment at required depth and orientation within a wellbore, wherein, "said equipment being secured to the latch sub by means of a first connection between said equipment and the anchor packer and a second connection between the anchor packer and the latch sub, wherein the first and second connections prevent relative movement between the connected components," as recited in independent claim 1, as amended.

As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. Of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Moreover, as pointed out in M.P.E.P. § 2143.03, "[t]o establish prima facie obviousness of a claimed invention, all the claimed limitations must be taught or suggested by the prior art". *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974). Since these criteria have not been met, Applicant respectfully asserts that the rejection under 35 U.S.C. § 102 should be withdrawn because *Hughes* does not teach or suggest each feature of independent claim 1, as amended.

In view of the above arguments, Applicant respectfully requests the rejection of independent claim 1 under 35 U.S.C. § 102 be withdrawn. Additionally, claims 2, 3 and 5, which depend from independent claim 1, are allowable at least because their base claim is allowable, as well as for the additional features recited therein.

Independent claim 4

With regard to independent claim 4, Applicant respectfully asserts that *Hughes* does not teach or suggest a method of positioning downhole equipment within a well bore, wherein "said equipment secured to the latch sub by means of a first connection between said equipment and the anchor packer and a second connection between the anchor packer and the latch sub, wherein the first and second connections prevent relative movement between the connected components," as recited in independent claim 4, as amended.

Applicant respectfully asserts that independent claim 4 is allowable for at least the reasons presented above for the allowance of independent claim 1, and the additional features recited therein. In the interest of avoiding redundant arguments, the reasons for the allowance of independent claim 4 are not repeated herein.

CONCLUSION


In view of the foregoing, Applicant respectfully requests reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicant's undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 04-2223. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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